Bosch Dairy #1

13567 South Whispering Lakes Lane, Ontario, CA 91761

February 26, 2016

John Tinger
US EPA (ENF3-1)
75 Hawthorne Street
San Francisco, CA 94105

Re: Response to January 13, 2016 Correspondence

Dear Mr. Tinger,

On January 13, 2016, you sent a letter and report relating to a September 29, 2015 inspection you conducted on Bosch Dairy #1 *(your letter referenced "Bosch Dairy #2, but after confirmation from Mr. Ed Kashak, it was clear that the dairy in question is Bosch Dairy #1).* In that letter, you noted three "areas of concern" that you identified during the inspection. This letter is intended to respond to those three areas of concern.

First, your letter states that "the 2014 Manure Tracking Manifest and facility documentation did not appear to clearly document the destination of manure." Attached are the Annual Reports and Manure Manifests for both 2014 and 2015. These have been clarified to accurately reflect the manure management in 2014 and 2015. I believe that when taken together, these reports clearly tell the story of the dairy's manure management for those two years. Here is a summary of what those reports say:

- At the start of 2014, there were no stockpiles.
- During 2014, approximately 1,883 tons of manure were generated on the dairy. Of that total, 420 tons were hauled to Kellogg Fertilizer (a manure composting facility nearby), and 1,463 tons were stockpiled on the dairy.
- During 2015, approximately 1,812 tons of manure was generated on the dairy. All of that manure was exported. In addition, the 2014 stockpile of 1,463 tons of manure was also exported during 2015. Collectively, that manure was hauled to Kellogg Fertilizer (1,565 tons) and a nearby crop field where it was used as a fertilizer (1,710 tons).
- As of December 31, 2015, there was no stockpile of manure on the dairy.

Second, your letter states that "the 2014 annual report did not contain nutrient analysis and the nutrient analysis was not available onsite." I would note that dairies are not required to include their manure nutrient analysis in their annual report to the RWQCB, but rather to certify that a copy is available onsite. We did that. In addition, while I believe I provided a copy of my most recent (at that time) manure nutrient analysis to you upon request during the inspection, I've

included a copy of it with this response as well. The analysis was done in December 2014, and was available to those receiving the dairy's manure throughout 2015 as the representative analysis required under the dairy permit. Subsequent to your inspection, the dairy submitted another manure sample to be analyzed in January 2016, and that is the analysis that will be available throughout 2016 as the representative analysis required under the dairy permit.

Finally, your letter states that "the concrete spillway had an accumulation of unconsolidated soil on top of the spillway which may block the spillway or cause erosion in event of overflow event." I have cleaned the spillway of any soil on top of it and included a picture as an attachment to this response.

I appreciate the opportunity to respond and hope these responses are adequate to address your concerns. If you or the Santa Ana RWQCB have any questions, please don't hesitate to contact me anytime.

Sincerely,

Bud Bosch
Bosch Dairy #1

2014 Annual Report

and

Manure Tracking Forms

Form 3.

ANNUAL REPORT
Regional Water Quality Control Board
Santa Ana Region
(Order No. R8-2013-0001, NPDES No. CAG018001)

Reporting Period: **January 1, 2014 through December 31, 2014**
Report Due Date: **January 15, 2015**

FACILITY INFORMATION (Please make any corrections directly on this form)	
CAFO Operator's Name	Bernard Bosch
CAFO Facility Name	Bosch Dairy
Facility Address	13567 Whispering Lakes Lane, Ontario
Mailing Address	13567 Whispering Lakes Lane, Ontario, CA, 91761
Telephone Number	~~909-947-4494~~ 951- 236- 1254

ANIMAL POPULATION (Please provide the number of animals in each category)

Milking Cows 500 Dry Cows 100 Heifers _____ Calves 120

Others (specify type and number) _____

MANURE INFORMATION Units Used: Tons X Cubic Yards ____

Manure Produced 1883 Manure Spread on Cropland at Facility 0

Manure Spread on Other Cropland 0

Manure Stockpiled on Site as of 12/31/14 1463

Manure Hauled Away (Also provide Manure Tracking Manifests, Form 4) 420

Was Manure Amount Calculated Using the Following Factors? Yes____ No X

1 Milking cow produces approximately 4.1 tons of manure per year
1 Dry cow produces approximately 4.1 tons of manure per year
1 Heifer produces approximately 1.5 tons of manure per year
1 Calf produces approximately 0.6 tons of manure per year

*1 ton of corral manure equals 2.32 cubic yards and 1 cubic yard of corral manure equals 0.43 tons

NUTRIENT MANAGEMENT PLAN (NMP) AND NUTRIENT ANALYSIS

NMP is Certified Yes ~~X~~ No_____ N/A

Has the most current nutrient analysis been provided to the recipient of the manure?

Yes X No_____

CROP GROWING ACTIVITY

Number of cropland acres where manure has been applied (Cropland is contiguous to the dairy, where manure was applied and a crop was harvested).

Cropland acres: 0 No. of plantings per year: One ___ Two ___ Three ___

Type of crops grown:

Sudan grass_____ Alfalfa_____ Winter wheat_____

Barley_____ Bermuda grass_____ corn_____ Oats_____ Turf Grass_____

Vegetables_____ Others_____

Actual crop yields_____

Manure application rates_____

Amount of manure spread on each field_____

Number of Milkings per day (Dairies only): One_____ Two_____ Three X

COMMENTS:

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of person making this report **(please print)**: Bud Bosch

Signature: Bud Bosch

Date: 1-3-2015

Title: Partner

Form 4.

Manure Tracking Manifest

Regional Water Quality Control Board
Santa Ana Region
Order No. R8-2013-0001, NPDES No. CAG018001
Reporting Period: January 1, 2014 through December 31, 2014

INSTRUCTIONS:

1. Complete one manifest for each hauling event and for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2. If there are multiple destinations, complete a separate form for each destination.
3. The CAFO operator must obtain the signature of the hauler upon completion of each manure hauling event.
4. The CAFO operator shall submit manure tracking manifest(s) with the Annual Report to Regional Board.

OPERATOR'S INFORMATION

CAFO Operator's Name: Bernard Bosch

CAFO Facility Name: Bosch Dairy

Facility Address: 13567 Whispering Lakes Lane, Ontario

Mailing Address: -SAA-

Telephone Number: 951-236-1254

MANURE INFORMATION

Manure analyzed for nutrients: Yes ☒ No ☐

Most current nutrient analysis of manure provided to the recipient of the manure[1]: Yes ☒ No ☐

MANURE HAULER INFORMATION

Name and Address of Hauling Company: Bosch Dairies 13567 Whispering Lakes Lane Ontario CA 91761

Phone Number: 909-223-3451

Contact Person Name: Brad Bosch

MANURE DESTINATION INFORMATION

Hauled to (please check):

- ☒ Composting Facility
- ☐ Regional Treatment Facility
- ☐ Croplands in Riverside County
- ☐ Croplands in San Bernardino County
- ☐ Croplands in other Counties _____

Amount removed: (Tons) or Cubic Yards
(Please enter the amount in the box below and circle the appropriate units)

~~1887~~ 420

Dates Hauled: 1-1-2014 to 12-31-2014

Destination of Haul: Kellogg

GPS Coordinates of Destination[2]: Latitude: 34.003474 Longitude: -117.615863

Destination Receiver of Manure: _____

Manure Quantity Delivered: 420

Approximate Acreage (If Destination is Cropland) _____

Crop(s) Grown on Cropland _____

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator's Signature: Bernard Bosch Date: 1-3-2015

Hauler's Signature: _____ Date: 1-3-2015

1. *The Regional Board may ask for a copy of manure nutrient analysis.*
2. *GPS coordinates shall be provided for all destinations within the Santa Ana Region.*

2015 Annual Report

and

Manure Tracking Forms

Form 3.

ANNUAL REPORT
Regional Water Quality Control Board
Santa Ana Region
(Order No. R8-2013-0001, NPDES No. CAG018001)

Reporting Period: **January 1, 2015 through December 31, 2015**
Report Due Date: **January 15, 2016**

FACILITY INFORMATION (Please make any corrections directly on this form)	
CAFO Operator's Name	Bernard Bosch
CAFO Facility Name	Bosch Dairy
Facility Address	13567 Whispering Lakes Lane, Ontario
Mailing Address	13567 Whispering Lakes Lane, Ontario, CA, 91761
Telephone Number	951-236- 1254

ANIMAL POPULATION (Please provide the number of animals in each category)

Milking Cows 500 Dry Cows 90 Heifers 30 Calves 180

Others (specify type and number) _____

MANURE INFORMATION Units Used : Tons X Cubic Yards ____

Manure Produced 1812 Manure Spread on Cropland at Facility 0

Manure Spread on Other Cropland _____

Manure Stockpiled on Site as of 12/31/15 0 _____

Manure Hauled Away (Also provide Manure Tracking Manifests, Form 4) 3275 tons
1812 produced + 1463 (2014 stockpile)

Was Manure Amount Calculated Using the Following Factors? Yes ____ No ✓

1 Milking cow produces approximately 4.1 tons of manure per year
1 Dry cow produces approximately 4.1 tons of manure per year
1 Heifer produces approximately 1.5 tons of manure per year
1 Calf produces approximately 0.6 tons of manure per year

*1 ton of corral manure equals 2.32 cubic yards and 1 cubic yard of corral manure equals 0.43 tons

NUTRIENT MANAGEMENT PLAN (NMP) AND NUTRIENT ANALYSIS

NMP is Certified Yes N/A No N/A

Has the most current nutrient analysis been provided to the recipient of the manure?

Yes ✓ No

CROP GROWING ACTIVITY

Number of cropland acres where manure has been applied (Cropland is contiguous to the dairy, where manure was applied and a crop was harvested).

Cropland acres: 0 No. of plantings per year: One ___ Two ___ Three ___

Type of crops grown:

Sudan grass_____ Alfalfa_____ Winter wheat_____

Barley_____ Bermuda grass_____ corn_____ Oats_____ Turf Grass_____

Vegetables_____ Others_____

Actual crop yields_____

Manure application rates_____

Amount of manure spread on each field_____

Number of Milkings per day (Dairies only): One_____ Two_____ Three X

COMMENTS:

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of person making this report **(please print)**: Bud Bosch

Signature: Bud Bosch

Date: 1-6-16

Title: Partner

Form 4.

Manure Tracking Manifest

Regional Water Quality Control Board
Santa Ana Region
Order No. R8-2013-0001, NPDES No. CAG018001
Reporting Period: January 1, 2015 through December 31, 2015

INSTRUCTIONS:

1. Complete one manifest for each hauling event and for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2. If there are multiple destinations, complete a separate form for each destination.
3. The CAFO operator must obtain the signature of the hauler upon completion of each manure hauling event.
4. The CAFO operator shall submit manure tracking manifest(s) with the Annual Report to Regional Board.

OPERATOR'S INFORMATION

CAFO Operator's Name: Bernard Bosch

CAFO Facility Name: Bosch Dairy

Facility Address: 13567 Whispering Lakes Lane, Ontario

Mailing Address: SAA

Telephone Number: 951 236-1254

MANURE INFORMATION

Manure analyzed for nutrients: Yes [X] No [ ]

Most current nutrient analysis of manure provided to the recipient of the manure[1]: Yes [X] No [ ]

MANURE HAULER INFORMATION

Name and Address of Hauling Company: SAA

Phone Number: 909-223-3451

Contact Person Name: Brad Bosch

MANURE DESTINATION INFORMATION

Hauled to (please check):

- [X] Composting Facility
- [ ] Regional Treatment Facility
- [ ] Croplands in Riverside County
- [ ] Croplands in San Bernardino County
- [ ] Croplands in other Counties _____

Amount removed: (Tons) or Cubic Yards
(Please enter the amount in the box below and circle the appropriate units)

1565

Dates Hauled: 3-17-15 to 10-8-15

Destination of Haul: Kellogg

GPS Coordinates of Destination[2]: Latitude: 34.003474 Longitude: -117.615863

Destination Receiver of Manure: _____

Manure Quantity Delivered: 1565 tons

Approximate Acreage (If Destination is Cropland) _____

Crop(s) Grown on Cropland _____

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator's Signature: Bernard Bosch Date: 1-6-16

Hauler's Signature: Brad Bosch Date: 1-6-16

1. *The Regional Board may ask for a copy of manure nutrient analysis.*
2. *GPS coordinates shall be provided for all destinations within the Santa Ana Region.*

Form 4.

Manure Tracking Manifest

Regional Water Quality Control Board
Santa Ana Region
Order No. R8-2013-0001, NPDES No. CAG018001
Reporting Period: January 1, 2013 through December 31, 2013

INSTRUCTIONS:

1. Complete one manifest for each hauling event and for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2. If there are multiple destinations, complete a separate form for each destination.
3. The CAFO operator must obtain the signature of the hauler upon completion of each manure hauling event.
4. The CAFO operator shall submit manure tracking manifest(s) with the Annual Report to Regional Board.

OPERATOR'S INFORMATION

CAFO Operator's Name: Bosch Dairy #1

CAFO Facility Name: //

Facility Address: 13567 Whispering Lakes Lane Ontario CA. 91761

Mailing Address:

Telephone Number: 951-236-1254

MANURE INFORMATION

Manure analyzed for nutrients: Yes [X] No [ ]

Most current nutrient analysis of manure provided to the recipient of the manure[1]: Yes [X] No [ ]

MANURE HAULER INFORMATION

Name and Address of Hauling Company: Three Brothers Farms 14100 S. Miliken Ave , Ca 91761

Phone Number: (909) 917-7752

Contact Person Name: Guillermo Torres

MANURE DESTINATION INFORMATION

Hauled to (please check):

- [ ] Composting Facility
- [ ] Regional Treatment Facility
- [ ] Croplands in Riverside County
- [X] Croplands in San Bernardino County
- [ ] Croplands in other Counties _____

Amount removed: (Tons) or Cubic Yards
(Please enter the amount in the box below and circle the appropriate units)

1,710

Dates Hauled: 08/25/15-08/29/15

Destination of Haul: Archibald and Edison

GPS Coordinates of Destination[2]: Latitude: 33.996508 Longitude: -117.594051

Destination Receiver of Manure: _____

Manure Quantity Delivered: 1,710 Tons

Approximate Acreage (If Destination is Cropland) _____

Crop(s) Grown on Cropland: Corn ,Hay

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator's Signature: [signature] Date: 1-6-16

Hauler's Signature: Guillermo Torres Date: September 5th, 2015

1. *The Regional Board may ask for a copy of manure nutrient analysis.*
2. *GPS coordinates shall be provided for all destinations within the Santa Ana Region.*

2015
Manure Nutrient Analysis

Soil & Plant Laboratory, Inc.
Leaders in Soil & Plant Testing Since 1946
4741 E. Hunter Ave, Suite A Anaheim, CA 92807 714-282-8777 (phone) 714-283-8575 (fax)
www.soilandplantlaboratory.com

SOIL ANALYSIS

Send To :
Bosch Dairy
13567 Whispering Lakes Lane
Ontario CA 91761

Project :
Manure

Report No : 13-354-0002
Cust No : 06800
Date Printed : 12/30/2013
Date Received : 12/20/2013
Page : 1 of 1
Lab Number : 13519

Sample Id : **Manure**

SATURATION EXTRACT - PLANT SUITABILITY

		Sensitive Crops Restricted	Many Crops Restricted
Salinity (ECe)	13.8 dS/m		
Sodium Adsorption Ratio (SAR) *	14.2		
Boron (B)			
Sodium (Na)	48.1 meq/L		
Chloride (Cl)			
Carbonate (CO3)			
Bicarbonate (HCO3)			
Fluoride (F)			

* Structure and water infiltration of mineral soils potentially adversely affected at SAR values higher than 6.

pH	7.6 s.u.	

EXTRACTABLE NUTRIENTS

			Very Low	Low	Medium	Optimum	Very High	
Available-N	1714 ppm	7.3						
Phosphorus (P) - Olsen	833 ppm	5.9						11 ppm
Potassium (K)	22740 ppm	24.9						
Potassium - sat. ext.	140.0 meq/L							1703 ppm
Calcium (Ca)	2400 ppm	0.2						
Calcium - sat. ext.	10.1 meq/L							
Magnesium (Mg)	1644 ppm	1.1						694 meq/kg
Magnesium - sat. ext.	13.8 meq/L							
Copper (Cu)								
Zinc (Zn)								
Manganese (Mn)								
Iron (Fe)								
Boron (B) - sat. ext.								
Sulfate - sat. ext.								
Exch Aluminum								

Cu, Zn, Mn and Fe were analyzed by DTPA extract.

PARTICLE SIZE ANALYSIS

118 %						

Graphical interpretation is a general guide. Optimum levels will vary by crop and objectives.

Picture of Spillway